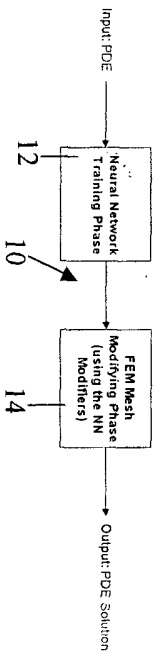


# Neural Network Time Series Forecasting of Finite-Element Mesh Adaptation

Fig. 1



## Neural Network Training Phase

## FEM Mesh Adaptation Phase

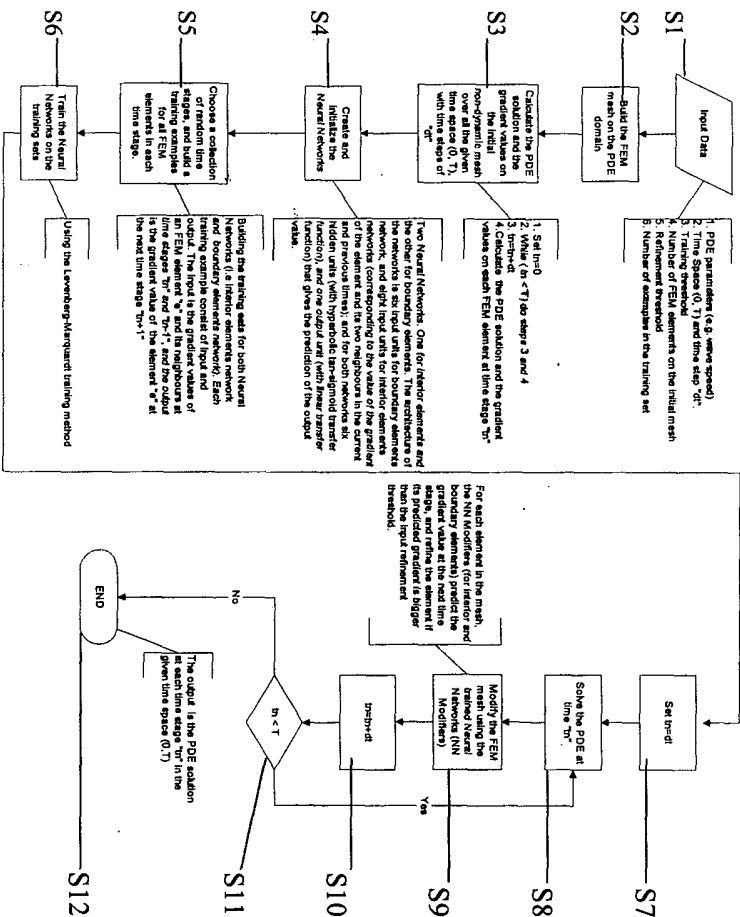


Fig. 4

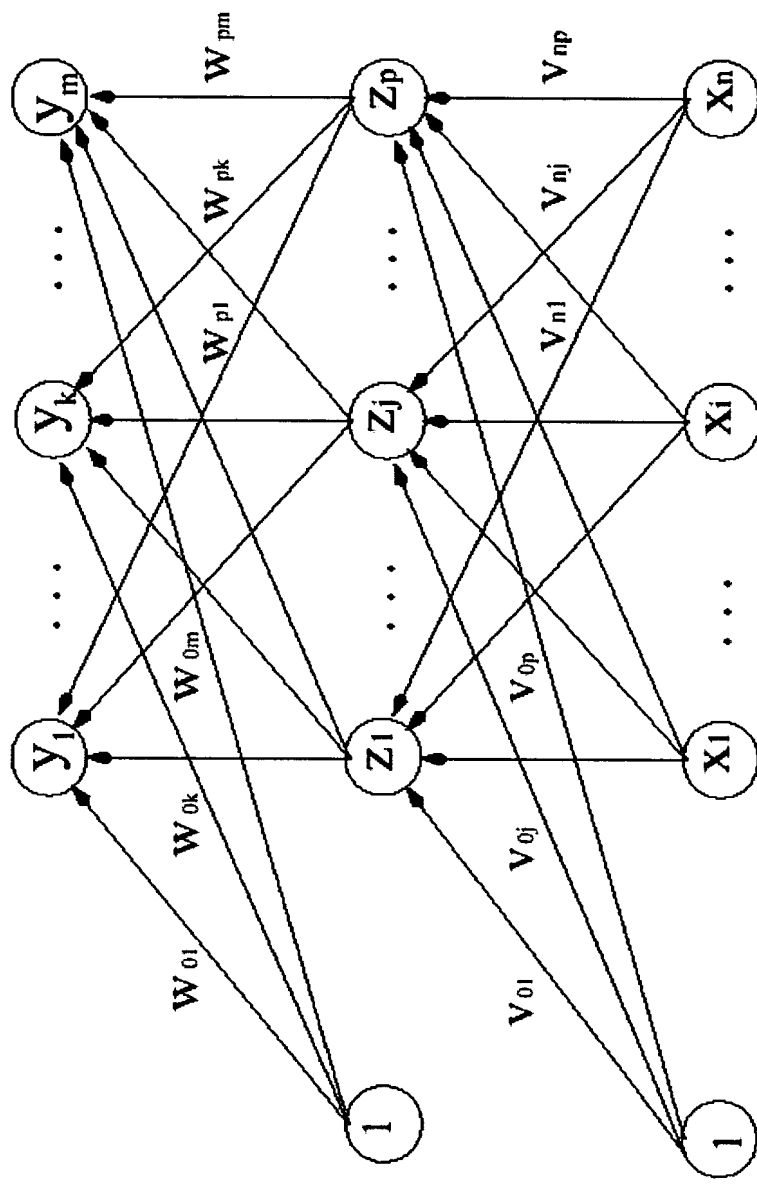


Fig. 2

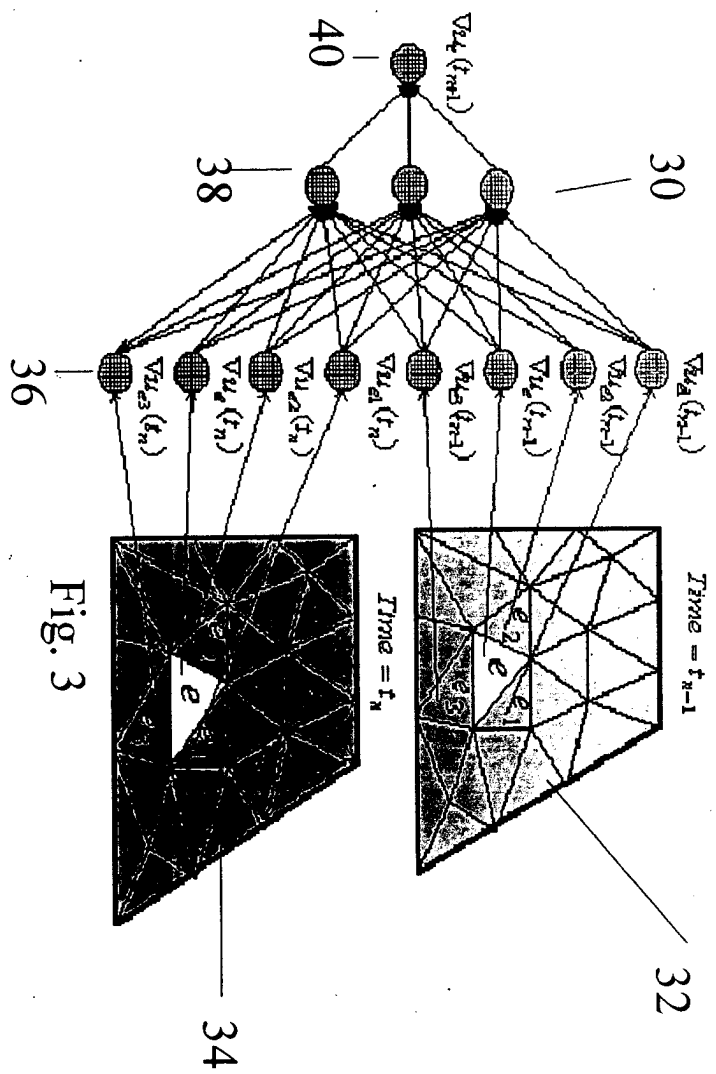
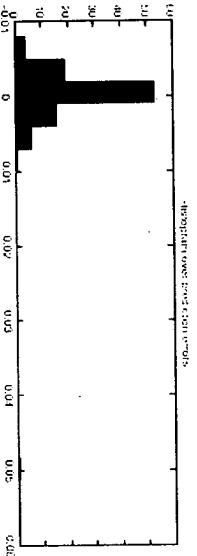
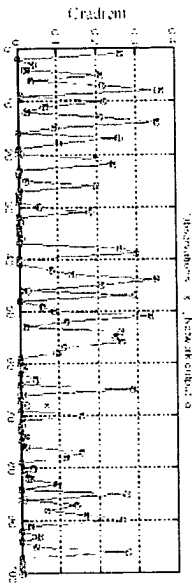


Fig. 3

# Gradient Prediction for Boundary Elements

Figure 5.1. Network output



## Gradient Prediction for Interior Elements

Figure 5.2. Network output

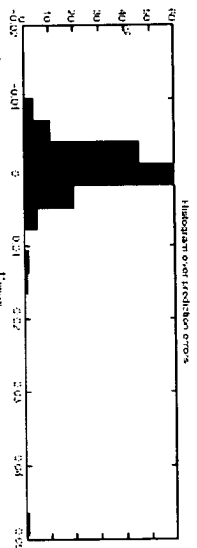
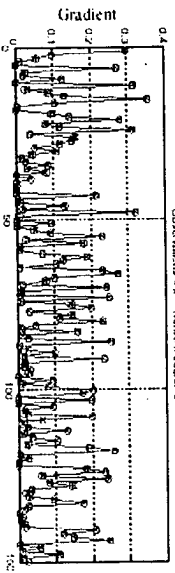


Fig. 5

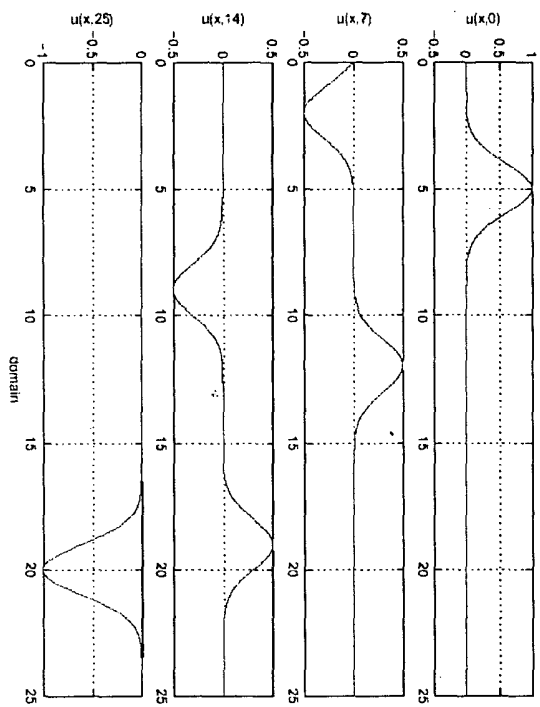


Fig. 6

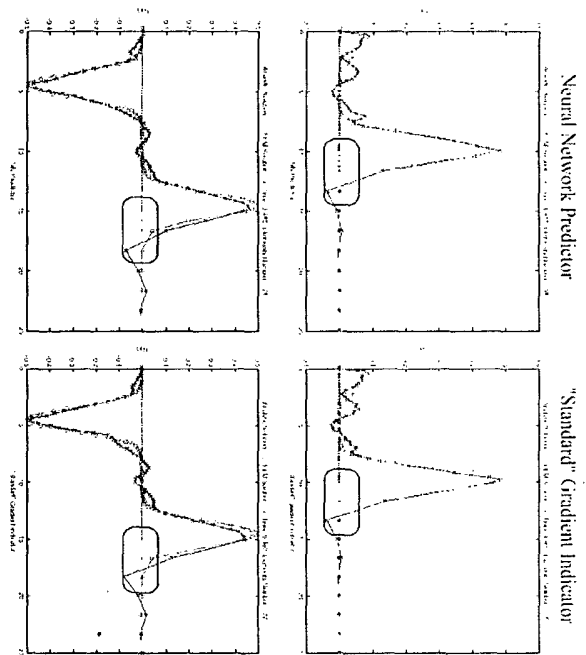


Fig. 8A

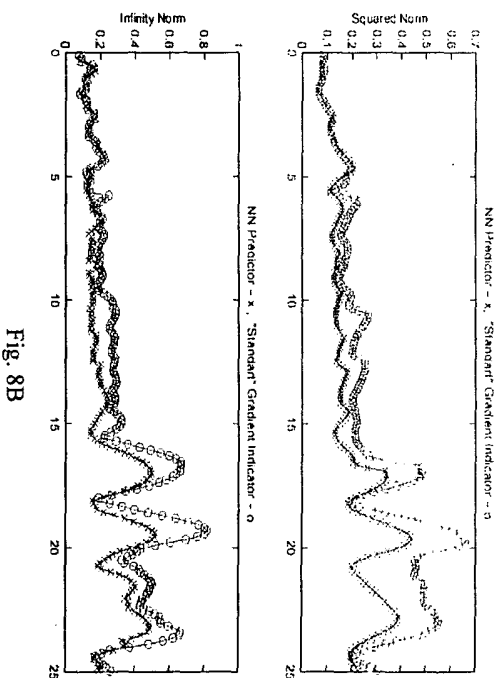


Fig. 8B

Fig. 7

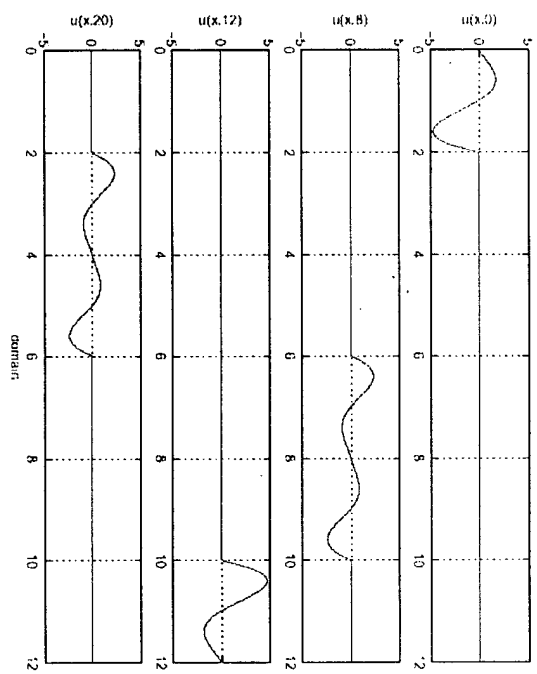


Fig. 9

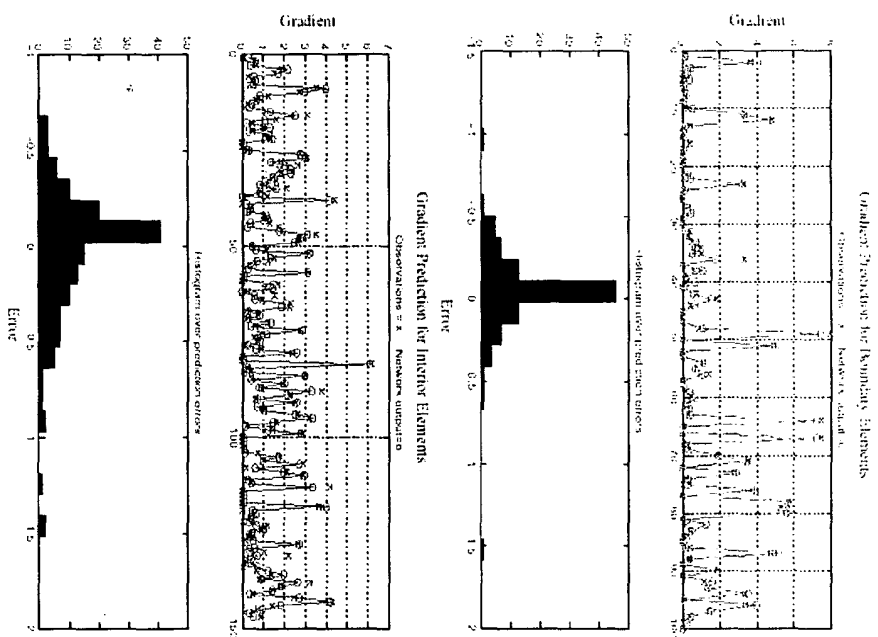


Fig. 10A

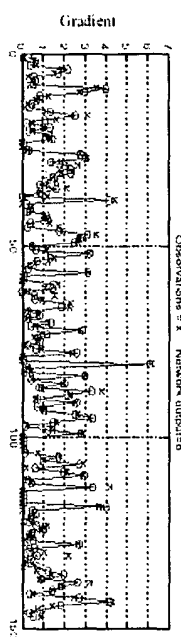


Fig. 10B



Fig. 11

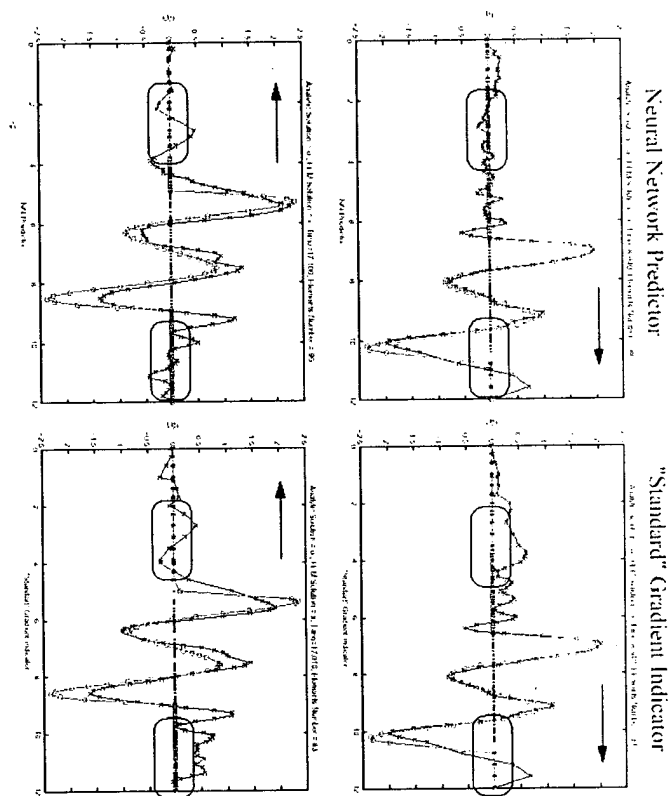


Fig. 12A

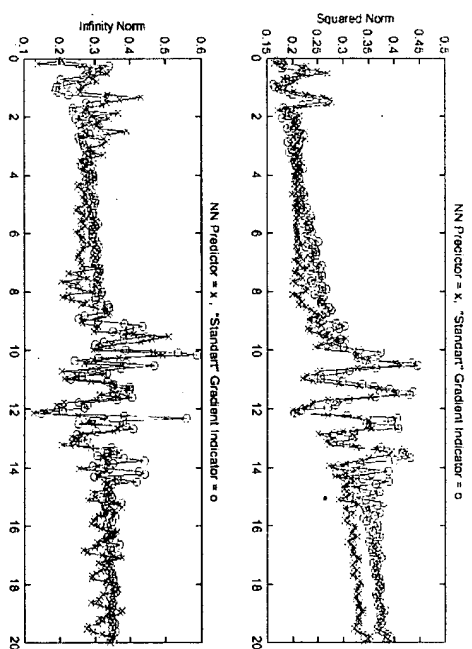


Fig. 12B

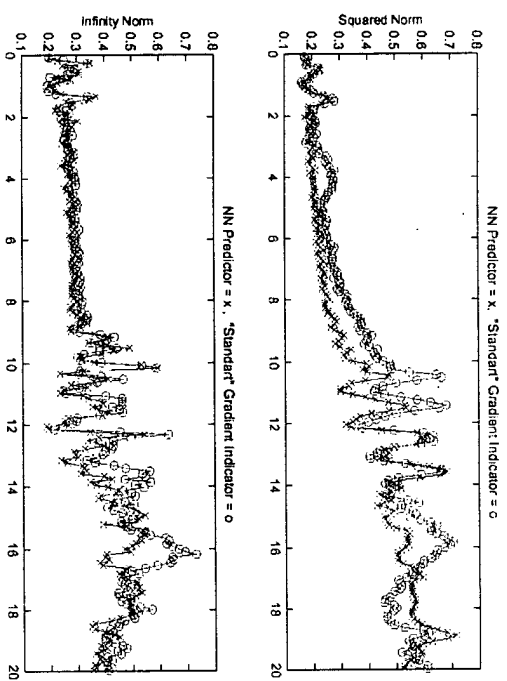


Fig. 13A

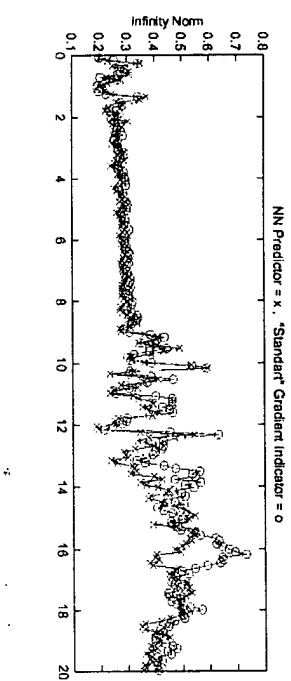


Fig. 13B

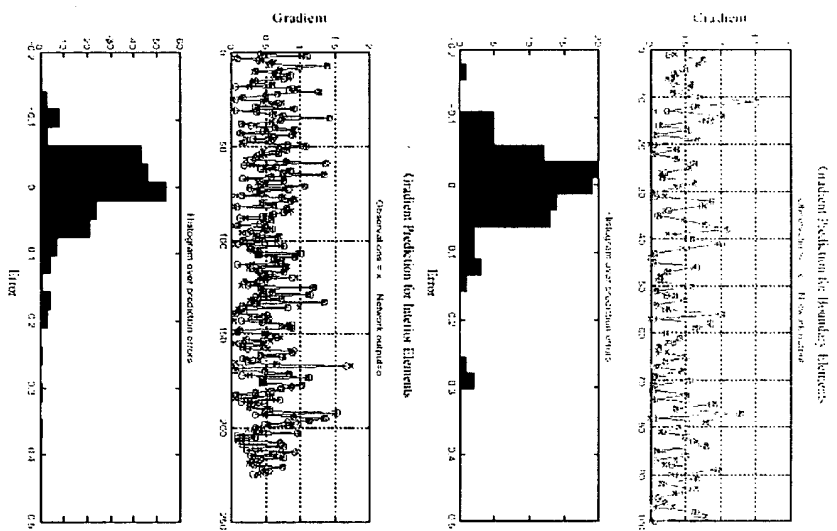


Fig. 14

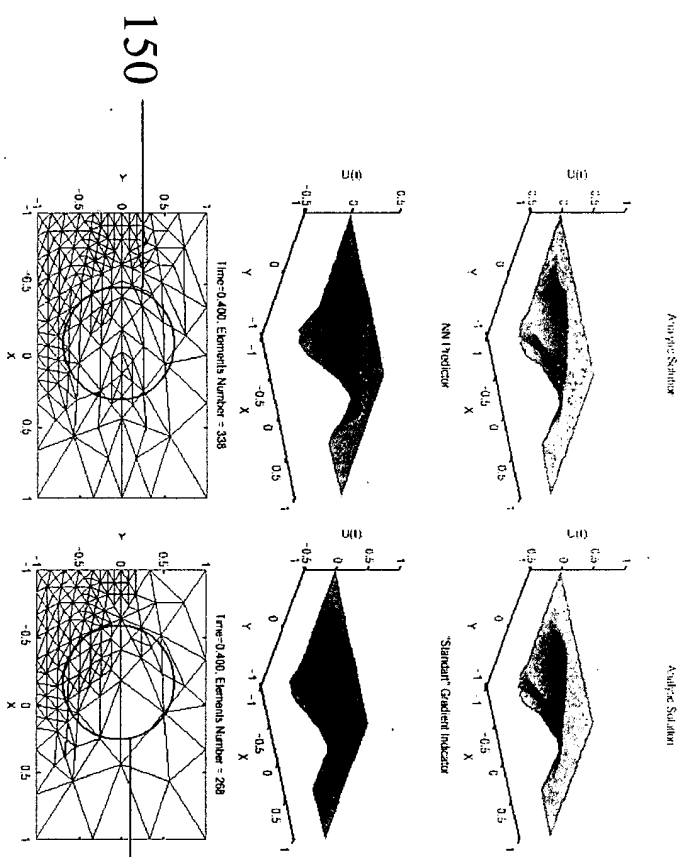


Fig. 15

150

150'

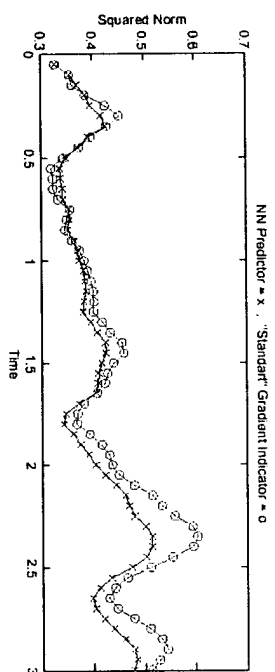


Fig 16A

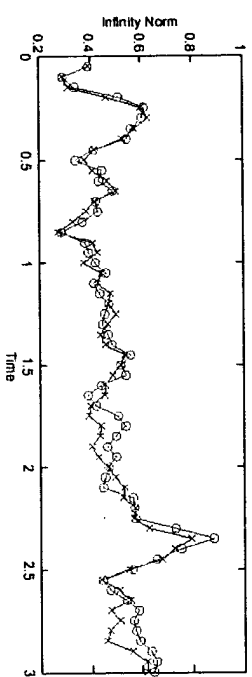


Fig. 16B